

**PLANT PATENT**  
**[File No. 10451.0037.NPUS01]**

**APPLICATION FOR UNITED STATES PLANT PATENT**

**for**

**CHRYSANTHEMUM PLANT NAMED 'ABBA'**

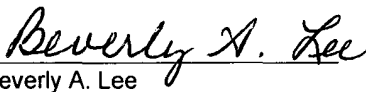
**by**

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This application claims the benefit of U.S. Provisional Application No. 60/396,828, filed July 17, 2002.

#### LATIN NAME OF THE GENUS AND SPECIES

Botanical classification: *Dendranthema grandiflora*.

#### 5 VARIETY DENOMINATION

The new Chrysanthemum variety denomination is 'Abba.'

#### BACKGROUND OF THE INVENTION

The present invention comprises a new and distinct cultivar of Chrysanthemum botanically known as *Dendranthema grandiflora* and referred to  
10 by the cultivar name 'Abba'. 'Abba,' identified as 211750 originated from a cross made in a controlled breeding program at Chichester, West Sussex, United Kingdom.

The female parent of the new variety is an undistributed, unpatented seedling identified as P371D4. The male parent of the new variety is an undistributed,  
15 unpatented seedling identified as 15 P381D4. The new variety 'Abba' has been asexually reproduced by vegetative cuttings in Chichester, West Sussex, United Kingdom and the distinguishing characteristics are retained through successive generations of asexual reproduction.

#### BRIEF SUMMARY OF THE INVENTION

20 'Abba' is a pot type of Chrysanthemum plant variety having dark pink straight single spoon flowers.

#### Comparison with Parent

Plants of the new Chrysanthemum variety 'Abba' are dissimilar to the parent cultivar 'P371D4' in plant habitat and growth rate. In side-by-side comparisons in  
25 Chichester, West Sussex, United Kingdom, under commercial practice, plants of the new Chrysanthemum variety 'Abba' differed from plants of the parent cultivar

'P371D4' in the following characteristics.

1. The new variety 'Abba' produces dark pink single spoon flowers whereas the parent cultivar 'P37 1 D4' produces pink single flowers.
2. Plants of the new variety 'Abba' have larger inflorescence than plants of the parent cultivar 'P371D4.'

#### Comparison with Other Varieties

Plants of the new Chrysanthemum variety 'Abba' are similar to the cultivar 'Scott' in plant habitat and growth rate. However, in side-by-side comparisons in Chichester, West Sussex, United Kingdom, under commercial practice, plants of the new Chrysanthemum variety 'Abba' compared to plants of the cultivar 'Scott' in the following characteristics:

1. The new variety 'Abba' produces dark pink single spoon flowers whereas the cultivar 'Scott' produces purple single spoon flowers.
2. Plants of the new variety 'Abba' have larger and taller inflorescence than plants of the cultivar 'Scott.'

#### BRIEF DESCRIPTION OF ILLUSTRATIONS

Typical specimens of the plant and flowers for the new Chrysanthemum variety 'Abba' are shown in the accompanying digital photograph. The colors shown are as true as possible within the usual limits of this kind of illustration. Figure 1 is a whole plant view of the new variety 'Abba' grown in a pot. The plant shown in the illustration and described here is 53 days from commencement of Short Days.

#### DETAILED BOTANICAL DESCRIPTION

The following description of the new Chrysanthemum variety 'Abba' is of plants grown in a greenhouse in Chichester, West Sussex, United Kingdom in the month of February. The cultivar has not been observed under all possible environmental conditions. The phenotype may vary significantly with variations in

the environment such as temperature, length of day and light intensity, without any variance in genotype. The commercial classification of the new variety is a pot Chrysanthemum.

Plants of the new variety have been grown successfully under temperature  
5 conditions averaging about 18°C at night and about 24°C to 25°C during the day under light conditions of about 5000 to 6000 foot candles. The plants respond well to the use of growth retardant, such as B9 treatment. To produce a commercial product the plants may be pinched once with the center bud removed. The typical container size for commercial growth is 14 cm. It has been observed that the shelf life of the new variety  
10 is about 24 days with a response time of about 8 weeks. The new variety is suitable for growth in a temperature range of 17°C to 28°C.

The following description is with respect to a plant produced as pot Chrysanthemum. In the description of this new Chrysanthemum variety, color values have been taken from the Royal Horticultural Society Colour Chart (R. H. S. C. C.).

15 Plant

Plant type: Pot

Habit: Upright and free branching

Height: 25 cm

Width: 32 cm

20 Branching Characteristics: Upright and free branching

Length of Lateral Branches: 6-11 cm

Number of Breaks from Pinch: 3-5

Stem Color: 137C

Response Time: 54

25 Vigor: Medium

Shelf Life: 24 days

Disease/Pest (Susceptibility/Resistance observed): None observed to date

Growth retardant type and treatment: 3 applications of 2.5 gm/litre B9 @ 2, 21 and 28 days after sticking of unrooted cuttings.

The plants were grown for 3 weeks in Long Day conditions (20 hours of light) and then transferred to Short Day conditions (13 hours of dark).

5 Propagation:

*Type:* Vegetative Propagation Via Stem Cuttings

*Time to rooting:* 12-14 days with soil temperatures of 18°C

*Rooting habit:* Fine and Fibrous

Foliage

10 Number of Leaves Per Lateral Branch: 8-10

Compound or single: Single

Arrangement of Leaves: Alternate

Shape of Leaf: typically 5 lobed ovate

Size of Leaf:            *Width* (cm): 4-6 cm    *Length* (cm): 6-10 cm

15 Leaf Apex: Acute

Base: Acute

Attachment: Petioled

Aspect: Slightly Undulating

Margin: Palmetely Lobed

20 Surface characteristics:    *Top:* Slightly pubescent

*Bottom:* Pubescent

Petiole:            Color: 137A

Length: 1.25 cm

Venation: Net prominent midvein at underside

25 Color: upper side: Near 137B

under side: Near 138B

Color:            Mature Leaf, *upper side:* Near 147A; *under side:* Near 138A

Young Leaf, *upper side*: Near 137A; *under side*: Near 138B

Flower

Flower appearance: Matte

5 Flower type: Single

Flower form: Cupped

Flower shape: Circular

Flowering habit: Cyme

Number of blossoms per branch: 3-5

10 Inflorescence form: Pyramidal

Depth of fully expanded blossoms: 2 cm

Diameter of fully expanded blossoms: 6 cm

Sepals:

*Number*: 25-30

15 *Outer Color*: Near 137C

*Length*: 0.5-1 cm

*Width*: 0.2 cm

*Texture/Appearance*: Pubescent

Peduncle: Peduncle length is shortest at the terminal flower and progressively longer

20 moving down the stem.

*Length*: 3-9 cm, average 5 cm

*Color*: Near 137C

*Surface*: Pubescent

*Habit*: Slightly Curving

25 *Strength*: Medium

Pedice: *Length*: terminal: 2-4 cm; lateral 3-6 cm

*Color*: Near 137C

*Surface*: Pubescent

*Habit*: Slightly curving

30 *Strength*: Medium

Ray Florets:

- 5      *Form/Shape* : Spatulate  
         *Texture/Appearance*: Matte  
         *Number per flower*: 35  
         *Length*: 2-4 cm; *Width*: 0.2-0.5 cm  
         *Apex*: Rounded  
         *Base*: Tubular  
         *Margin*: Entire

10    Disc florets:

- Form/Shape*: Cylindrical  
         *Texture/Appearance* : Shiny  
         *Number per flower*: 200-450  
         *Length*: 0.6-0.9 cm; *Width* 0.1 cm  
15      Diameter of Disc: 1 to 2 cm

Fragrance: Faint

Flower Bud (at onset of color):

- Length*: 1.5 cm  
         *Diameter*: 1 cm  
20      *Form/shape*: Globular

General flower color:

1.      Ray florets, *upper side*:  
                 *Immature*: Near 63A  
                 *Mature*: Near 63B  
25           *Older/Fading*: Near 63C
2.      Ray florets, *under side*:  
                 *Immature*: Near 76B  
                 *Mature*: Near 76C  
                 *Older/Fading*: Near 76D
- 30      3.      Disc florets:  
                 *Immature*: Near 143B  
                 *Mature*: Near 151B

*Older/Fading:* Near 151C

4. Bud: 137A

Flower progression with age: Flower form does not change with age but there is a slight color fading.

5 Reproductive Organs

Ray Florets: Pistillate

10 *Pistil Number:* >30  
*Stigma color:* Near 6C  
*Stigma shape:* Forked  
*Style Color:* Near 6D  
*Style Length:* 0.5 cm

Disc Florets: Pistillate

15 *Pistil Number:* >25  
*Stigma color:* Near 6C  
*Stigma shape:* Forked  
*Style Color:* Near 6D  
*Style Length:* 0.4 cm

20 *Staminate:*  
*Stamen Number:* 10  
*Anther Shape:* Thread  
*Anther Color:* Near 13B  
*Pollen Color:* Near 13B  
*Pollen Quantity:* Little

25 Fruit and Seeds: None observed to date